

Solar-B a closer look at the Sun

The Sun and the Earth

The Sun is the heart of the Solar System, and essential to life on Earth. The Sun supplies energy to the food chain, drives weather and the water cycle, circulates our atmosphere, and prevents the oceans from freezing.

The Sun is also the only star close enough for us to examine in detail. It serves as a laboratory where we can learn about other stars and about universal phenomena. We have measured the Sun's age, size, mass, and brightness, and have explored its atmosphere in great detail. Most recently, we have begun to probe the Sun's interior and learn details about the processes that drive its powerful and dynamic magnetism. But our exploration of the Sun has only just begun.

Solar-B

We seek to understand how our Sun works, why it changes, and how those changes affect the Earth. A satellite named Solar-B will allow us to examine our Sun in greater detail, across more wavelengths of light, and faster than ever before.

Solar-B is a mission of Japan Aerospace Exploration Agency, in partnership with the United States' National Aeronautics and Space Administration and the United Kingdom's Particle Physics and Astronomy Research Council. Solar-B will launch in 2006 from Kagoshima, Japan. The main optical telescope's Focal Plane Package is designed and built by the Lockheed Martin Solar and Astrophysics Lab.

Solar-B Spacecraft Illustration Copyright © 2004 B.E. Johnson, All Rights Reserved
Earth's Aurora from Space Shuttle image courtesy of NASA, STS-039
This poster was produced by Chabot Space & Science Center as part of the
Lockheed Martin Solar-B FPP Education/Public Outreach program